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Constraints of Implicit Focus on Form

Constraints of Implicit Focus on Form: Insights from a Study of Input Enhancement

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ABSTRACT

Previous research on implicit *focus on form* (FonF) has shown that target forms are not always noticed by learners, suggesting that externally-created salience (by the teacher) does not necessarily guarantee learners' internally-generated salience (Sharwood Smith, 1991, 1993). In an attempt to explore ways of promoting both types of salience, an input enhancement study was conducted in order to examine if, and how, externally-created salience may ideally converge with learners' internally-generated salience. The results revealed that increasing the perceptual salience of target form(s) does not automatically lead to learners' noticing of the form(s). In addition, the findings suggest that noticing is largely dependent on internal, cognitive factors such as learner readiness (vis-à-vis the target form), knowledge of the first language, and L2 language-learning experience. Based on the results and insights gathered from online protocol data, a number of constraining factors that need to be considered *a priori* in achieving a successful focus on form are identified and discussed. In particular, the current study underscores the importance of respecting learner-internal factors, such as their developmental readiness and their internal agenda for learning.

INTRODUCTION

In recent Second Language Acquisition (SLA) literature, there has been a renewed interest in whether grammar should be taught in second language (L2) classes and how this could be incorporated. This stems from an effort to strike a balance between the structuralist approach which emphasizes accurate production of L2 forms, and the communicative approach which focuses on promoting meaningful communication in real contexts. This attempt has culminated in what has been known as *focus on form*. A syllabus with a focus on form (FonF) can be broadly defined as attracting learners' attention to linguistic forms during communication, which can be achieved by using a variety of pedagogical interventions, ranging from the most explicit metalinguistic rule explanation to the most implicit visual input enhancement (Doughty, 2000). Many of these studies (e.g., Alanen, 1995; Doughty, 1991; Jourdenais, Ota, Stauffer, Boyson, & Doughty, 1995; Leeman, Arteagoitia, Fridman, & Doughty, 1995; Trahey & White, 1993; White, 1998) have employed a proactive approach by looking at the effects of enhanced input (Sharwood Smith, 1993) or input flood (Trahey & White, 1993) on *noticing* and acquisition, while a number of more recent studies (e.g., Doughty & Varela, 1998; Han, 2002a; Long, Inagaki, & Ortega, 1998; Mackey & Philp,

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1998; Philp, 2003) have taken a reactive approach by exploring the effects of a particular type of feedback, *recasts*, on acquisition. Not all findings, however, have reported positive results. Research findings have shown that the linguistic features targeted in various studies were not always noticed by learners, and that this was more so in studies where implicit FonF was used as the method of pedagogical intervention. Such findings suggest that there may be some constraining factors involved in achieving successful focus on form. In addition, mixed results also indicate that there may be a mismatch between the forms that the teacher intends for the learners to notice and the forms that learners themselves notice. In view of the above, the current study attempts to investigate the constraining factors that may be at work in achieving effective focus on form, in hopes of exploring how some of the constraints may be lifted.

Focus on Form

According to Long and Robinson (1998), FonF refers to how focal attentional resources are allocated, and “the intended outcome of FonF is what Schmidt calls *noticing*” (p. 24). In his seminal article, Long (1991) made an important distinction between focus on form and focus on forms. *Focus on forms* refers to the traditional way of teaching linguistic elements such as structures, notions, and lexical items where language is treated primarily as an object to be studied and practiced. This differs from *focus on form* in which the central focus is on meaning. In his initial formulation, Long articulates that FonF overtly draws students’ attention to linguistic elements as they arise incidentally in lessons whose overriding focus is on meaning or communication. Here, he identifies two essential characteristics inherent in FonF: (1) Attention to form occurs in lessons where the primary focus is on meaning or communication, and (2) attention to form arises incidentally in response to a communicative need. Recently, however, the term *focus on form* has been stretched to accommodate more practical needs. In the reconceptualized version of FonF, three defining characteristics are mentioned: (1) the need for learner engagement with meaning to precede attention to the code; (2) the importance of analyzing learners’ linguistic needs to identify the forms that require treatment; and (3) the need for the treatment to be brief and unobtrusive (Doughty & Williams, 1998). While (1) and (3) are in line with Long’s original definition, (2) is not, for it advocates a planned or proactive approach rather than an incidental attention to form (Ellis, 2001). And as will be discussed shortly, the current study bears more relevance to proactive or planned FonF, in which the linguistic feature is typically selected before the treatment. Hence, the term *focus on form* as used in this paper will be the broader one formulated by Doughty and Williams (1998).

As noted above, the essence of focus on form can be seen as one of focusing learners’ attention on features of the L2. While many SLA researchers agree that some kind of attentional process is required for input to become intake, opinions vary as to the amount and type of attention necessary for SLA. Schmidt (1990, 1993, 1994), for example, has proposed that noticing at the level of awareness is necessary and sufficient for converting input into intake and for subsequent second language development. He contends that all noticing is conscious, and links noticing to one’s subjective experience and the ordinary ability to articulate such experiences, operationalizing it as “availability for self report” (Schmidt, 1990, p. 132) at or immediately after the experience. Therefore, for Schmidt, learners must first demonstrate a conscious apprehension and awareness of some particular form in the input before any subsequent processing of that form can take place. On the other hand, Tomlin and Villa (1994) argue that although attending to input is necessary, awareness may be dissociated from attention, and that it is not necessary for learning. Accordingly, it follows

from their definition that there can be learning without awareness. This view conflicts with that of Schmidt's, which advocates the role of consciousness in language learning. More recently, Schmidt (2001) discusses attention and its subjective correlate of noticing to awareness at a very low level of abstraction. Here, he equates noticing as a technical term equivalent to *apperception* (Gass, 1988, 1997), to Tomlin and Villa's (1994) *detection within selective attention*, and Robinson's (1995) *detection plus rehearsal in short-term memory* (p. 296). Despite the differing positions that different researchers take on the attention and awareness issue, research results show growing evidence that attention to input plays a crucial role in L2 learning (e.g., Gass, 1988, 1997; Leow, 1998; Robinson, 1995; Rosa & O'Neill, 1999; Schmidt, 1990; VanPatten, 1990, 1996, etc.).

According to Doughty and Williams (1998), the issue of whether conscious, focal attention is necessary is important because "this choice has an impact on the degree of overtness or obtrusiveness of the FonF technique" (p. 229). They highlight that learning can involve overt noticing (via explicit FonF) or it can involve more automatic access (via implicit FonF). They further point out that there are various ways or techniques in achieving FonF, and arrange different FonF techniques on what they call an *explicitness continuum*.² Along this continuum, the ones that are placed on the *implicit* end involve those techniques pertaining to unobtrusive, incidental, and example-based FonF including input flood and input enhancement techniques. On the other hand, those techniques on the *explicit* end employ overt, unobtrusive, and rule-based types of FonF such as consciousness-raising tasks and garden path techniques (Tomasello & Herron, 1988; also see Doughty & Williams, 1998, for a detailed discussion on the obtrusiveness of different types of FonF techniques).

As mentioned already, FonF can be either proactive or reactive. Reactive or incidental FonF refers to unplanned or reactive approach to drawing learners' attention to form. It typically consists of negative feedback teachers provide in response to learners' actual or perceived errors.³ On the other hand, proactive FonF emphasizes the designing of tasks with a predetermined linguistic syllabus in mind in order to ensure that opportunities to learn/use problematic forms will indeed arise. Therefore, in the case of proactive approach, FonF is used to describe the teacher's *observable external behavior* (Long & Robinson, 1998) which attempts to draw the learner's attention to certain forms that have been perceived to be problematic for students by increasing perceptual salience of these forms. Not surprisingly, many of the proactive FonF studies conducted to date have opted to employ some sort of input enhancement techniques, which were first introduced by Sharwood Smith (1991, 1993).

Input Enhancement as Focus on Form

Most input enhancement studies to date have employed visual manipulation of input in the hope of directing the learner's attention to the target form(s). The basic method of visual input enhancement⁴ involves increasing the perceptual salience of the target form by using a combination of various formatting techniques such as bolding, capitalizing and underlining of target forms. Input enhancement is considered to be an unobtrusive means of drawing the learner's noticing of linguistic forms, and is accordingly placed at the implicit

² The explicitness continuum is also referred to as the FonF continuum.

³ Many of these reactive FonF studies have been extensive in nature, targeting a variety of linguistic features. More recently, however, several reactive FonF studies have focused on a particular linguistic feature in order to provide focused and consistent feedback to the students (e.g., Doughty & Varela, 1998; Han, 2002a; Philp, 2003).

⁴ Visual input enhancement is also known as textual or typographic input enhancement.

end of the explicitness continuum (Doughty & Williams, 1998). The ensuing section will review a number of studies that have employed input enhancement as focus on form.

In an attempt to examine whether input enhancement make L2 forms more noticeable to learners' online processing of target forms, Jourdenais et al. (1995) conducted a study on 14 English speaking learners who were divided into two groups. Students in the Enhanced Group received a sample text in which all Spanish preterit and imperfect verb forms were highlighted via means of underlining, bolding, and changing of the font. The participants in the Comparison Group received the same text without any typographical modification. Data were collected through a picture-based writing task where the learners were asked to supply concurrent think-aloud reports of their language behavior while writing the story. Results from this study showed that learners in the Enhanced Group noticed and produced more target forms, providing evidence that highlighting the forms in the input increased the likelihood of their being noticed.

In another experiment, Leeman et al. (1995) also examined the effects of focus on form on the learning of preterit and imperfect tenses in Spanish on two types of content-based instruction. One was a communicative class that focused solely on meaning, and the other was a content-based FonF class, which incorporated a number of input enhancement techniques which varied in degrees of explicitness and elaboration (via highlighting, underlining, and/or color-coding) as well as corrective feedback on the target forms. Their results also showed that participants in the FonF Group significantly improved accuracy and supplience of the target forms, suggesting that content-based classes with FonF instruction which incorporates input enhancement and corrective feedback are more effective than a content-based class which is purely communicative in nature. In their conclusions, Leeman and colleagues openly attribute the gains for instruction to enhanced learner noticing.

The positive results reported in the aforementioned studies notwithstanding, there have also been cases where the attempted FonF did not seem to affect the noticeability of the forms in focus. White (1998) conducted a study where she typographically enhanced the target form (English third person singular possessive determiners) on francophone Quebecois. Contrary to the researcher's hypothesis, the results revealed that the enhanced input did not play a significant role. Similar results were also reported by Alanen (1995) who also conducted an input enhancement study targeting the locative suffix and the consonant alternation of semi-artificial Finnish on English speakers. Alanen reports that the enhancement seemed to have a facilitating effect on the learners' recall and use of the locative suffixes, but not on consonant alternations. Hence, these findings seem to indicate that externally manipulating the salience of the target forms does not always result in learners' noticing of target forms, and that there may be several unforeseen factors which can be attributed to the mixed outcome of studies. One important factor seems to be the target linguistic form in question. The target forms for Jourdenais et al.'s (1995) and Leeman et al.'s (1995) studies were Spanish preterit and imperfect verb forms, which are both frequent and semantically important, and therefore more meaningful than the possessive determiners in White's (1998) study. Similarly, in Alanen's (1995) study, moderate gains in accuracy were observed for the locative suffix which has a "more or less clearly definable semantic content" (p. 269) but not for the consonant alternation, which is "semantically empty" (p. 269). These observations lend support to previous research findings which underscore that learners may be more prone to notice some linguistic features than others, and that linguistic forms with more semantic value are more likely to be noticed than forms with less semantic values (Bardovi-Harlig, 1995; Doughty & Williams, 1998; VanPatten, 1996).

Developmental Readiness

As mentioned above, the choice of the target linguistic form seems to play a crucial role in achieving successful FonF. Additionally, there is yet another important factor that can be extracted from the foregoing reviews, which necessarily goes hand-in-hand with the target linguistic form, that is, the issue of learner readiness. Following Pienemann's (1985, 1989) initial claim that the learnability of a linguistic structure is dependent on the readiness of the learner to acquire the form at a particular point in time, several researchers (e.g., Han, 2002b; Izumi, 2002; Mackey & Philp, 1998; Williams & Evans, 1998) have repeatedly emphasized that learners are more likely to notice forms that they are ready to learn and internalize, and that aiming at target structures which are too advanced for learners may not be effective. This is an important issue for it puts an emphasis on the internal, cognitive state of the learner, rather than the external factors such as the type/presentation of the input the learner is exposed to. This inevitably invokes the notion of input and intake where intake is defined as that subset of input which gets internalized by the learner (Chaudron, 1985; VanPatten, 1996). As Corder (1967) noted in his seminal article, "it is the learner who controls the external stimuli, or the input, or more properly, his *intake* [italics added]" (p. 165). According to Corder, what becomes intake is likely to be determined by the characteristics of the learner's language acquisition device (i.e., internal factors) and not by those of the syllabus (i.e., external factors). Arguing that there is an innate *learner-generated sequence*, and equates this to the learner's *built-in syllabus*, he contends that the learner-generated sequence, which corresponds to his/her internal syllabus, may be more important than instructor-generated sequence or external syllabus. In a similar vein, more than 30 years later, Long and Robinson (1998) also emphasize that a more important sense of focus on form than the teacher's external behavior is the learner's *internal mental state*. It follows then that the effectiveness of FonF essentially depends on successfully striking a match between the learners' built-in or internal syllabus (Corder, 1967) and the teacher's external behavior. With this in mind, the question that naturally follows is how this match could be achieved, and whether it is in fact feasible.

Internal vs. External Saliency

The notion of learner's built-in syllabus and external syllabus is very much in line with the notion of a learner's internal and external saliency which was first introduced by Sharwood Smith (1991). In his discussion of consciousness-raising, Sharwood Smith argued that what is made salient by the teacher may not be perceived as salient by the learners, since externally-created salience does not guarantee internally-created salience. Hypothetically, it seems that FonF techniques such as input enhancement would be most effective when the externally-created salience successfully echoes with the learner's internally-created salience. Although the notion of internal saliency has not been explicitly formulated, it is inherently related to learner readiness, which works vis-à-vis the target form in facilitating learners' noticing of the target form(s). Recently, Sharwood Smith (1999) has distinguished internally-generated enhancement into *subconscious* and *conscious* saliency. In this framework, the learner's acquisition mechanisms locate and fix on formal features of the L2, following some principles not consciously dictated by the learner (e.g., the learner may be naturally or automatically sensitive or attracted to high frequent words, short words, or unusual sounding words); or the learner consciously and deliberately locates and fixes on formal features (e.g., learners may decide to memorize list of vocabulary items devoted to cooking, or pay special attention to words when watching a particular television program). The notion of internally-

generated enhancement is certainly very attractive, and of great interest to SLA researchers. Although Sharwood Smith has not yet articulated in detail (to the best of my knowledge) how this internal saliency could be achieved, its importance and how it might be achieved has been implicated sporadically in the L2 literature (e.g., Ellis, 2001; Han, 2002b; Long & Robinson, 1998, etc.). It appears that when Sharwood Smith abandoned the term *consciousness raising* for *input enhancement*, he was well aware of the fact that the term consciousness raising suggests tapping into the learner's internal saliency, which is difficult to achieve. However, the other side of the coin is that when input enhancement (or any other type of FonF intervention) actually manages to tap into the learner's internal saliency, this would in fact result in consciousness raising in the true sense of the word. Even though it would be very difficult to tap into the learner's subconscious saliency, it may be possible to tap into his/her conscious saliency by employing some pedagogical intervention, provided that the target form is carefully chosen for the target students. In this regard, the FonF that the teacher intends should ideally facilitate the unfolding of the learner's internal syllabus (Long & Robinson, 1998), resulting in congruence between externally-created salience and the learner's internally-generated salience. Without a doubt, there are many complex factors involved in achieving a harmony between the two ends. As such, the current study is an exploratory study which attempts to investigate the factors that may contribute to a harmonious FonF, in hopes of exploring how one might successfully tap into the learner's internal salience.

THE STUDY

In order to investigate factors surrounding learners' noticing of target forms, the participants were divided into two groups: an Input Enhancement Group and a Comparison Group. The following research questions were posed:

- 1) Are learners in the Input Enhancement Group more prone to notice the target linguistic forms than learners in the Comparison Group after the FonF intervention?
- 2) What induces noticing on the part of the Comparison Group?

While the first research question addresses the effect of externally-created salience on learners' noticing of target forms, the second questions attempts to explore potential factors which may drive learners' internally-generated noticing of the target forms.

Participants

The participants for the study comprised 24 English as a Second Language (ESL) students enrolled in three different high-intermediate ESL classes in New York City. Their ages ranged from 18 to 40, with various first language (L1) backgrounds: Thai (2), Korean (3), Chinese (4), Malayalam (1), Spanish (6), Hungarian (1), Russian (1), Polish (1), French (4), and Hebrew (1). Since the subjects came from three different classes, it was important to ensure that they were at a similar proficiency level in order to minimize any effects resulting from differential proficiency levels.⁵ A week before the treatment, a pre-test (consisting of 20 cloze test items) was conducted on four candidate classes to ensure that they were more or

⁵ Ensuring that learners are at similar proficiency levels would increase the likelihood of their being at a similar stage of their built-in syllabus.

less at the same proficiency level. One of the four classes, which turned out to be more advanced than others, was abandoned. Students in each class were ranked according to their pretest results, and were paired up with another student who was judged to be at a similar proficiency level. Initially, there were 13 dyads (totaling 26 participants) who participated in the study. However, one dyad failed to follow the precise instructions in carrying out the tasks, and was eliminated from the final data analysis.

Target Linguistic Form

Since the FonF technique employed in the current study involved visual input enhancement which is considered to be one of the most implicit ways of drawing the learners' attention to form, it was deemed important to choose a form that had some semantic value. This decision was motivated by previous research findings (e.g., Alanen, 1995; White, 1998; Doughty & Williams, 1998) on implicit FonF which have suggested that learners seem to notice words (or forms) with more semantic or communicative value in them. In addition, the purpose of the study was not to teach a new structure, but to see the effects (or lack thereof) of an implicit type of FonF. Hence, it was decided that the target linguistic form should not be entirely new to the students, but should be a form which they have some partial, developing knowledge of. Hypothetically, this would increase the likelihood of matching the target linguistic form that the teacher (or the researcher) intends to focus on, with the linguistic form that learners are developmentally ready to acquire. Upon reviewing the participants' oral and written productions, as well as consulting with their teachers, backshifting of reported speech was chosen as the target linguistic form. In English, the tense in the reported clauses is controlled by the tense in the reporting clause. For example, when the reporting verb is in the past tense, the verb in the reported clause should backshift:

Direct quotation: *"I left the conference on Saturday."*
Backshifting: *He said that he had left the conference on Saturday.*

Direct quotation: *"I was shopping at the mall."*
Backshifting: *She said that she had been shopping at the mall.*

Reviewing the students' written productions from previous lessons as well as the results of the pretest administered prior to the treatment revealed that most of the participants had very little knowledge of this particular linguistic form. Some example sentences that students produced on the pretest (cloze test) are given below:

**Peggy told me that she will be in town the following week.*
**She said that she has to attend an important meeting the next day.*

It should be borne in mind that since the study was conducted in intact classrooms, the researcher did not have the option of dropping individual students who failed to demonstrate some minimal knowledge of the target form. Furthermore, this linguistic form was not readily observed in the students' spontaneous production. Therefore, even though the ideal set-up would be to conduct the study in a classroom where all the students had a uniform, emerging knowledge of the target form, this turned out to be rather ambitious and unrealistic, given the heterogeneous nature of students in a real-life language classroom. And as will be discussed shortly, this drawback (i.e., a rather fuzzy picture of the learners' knowledge of the target form) prompted the researcher to incorporate two similar tasks in the study design where the

first task served more as a pretest aiming at gauging the students' initial knowledge of the target form.

Tasks

Deciding on the target linguistic feature was a tough decision – as was deciding on the task. As Loschky and Bley-Vroman (1993) noted, “the characteristics of a task are often such that a particular structure is likely to arise naturally” (p. 132). Therefore, the task and the linguistic form often go in tandem. For the purpose of this study, it was deemed important to design the task in such a way that the task itself would in some natural way encourage the use of the target structure, but not force it in any obligatory manner, thereby minimizing task essentialness (see Loschky & Bley-Vroman, 1993) in order to ensure that the Comparison Group was not inadvertently primed by the task effects.

There were two tasks (Task 1 & Task 2) which were exactly the same in nature. A cartoon strip was used in each task to elicit data. The cartoon strips were taken from *It's a Big World, Charlie Brown* by C. Schulz. The stories in both cartoons involved the characters talking about past events. Students had to work in dyads. Each dyad was given a piece of paper, and was asked to collaborate in reconstructing the story. Students were advised to work together, and were encouraged to think aloud, and share their thoughts with each other. It was anticipated that in the process of rewriting the cartoon story (which typically consists of direct quotes written in speech bubbles), learners would be naturally inclined to use reported speech. Both comic strips (for Task 1 and Task 2) involved the characters talking about past events, and each comic strip had six usages of verbs used in the past form which could be backshifted into the past perfect or the past perfect progressive, if reformulated into reported speech.

Procedure

The study was conducted in three intact classrooms by the researcher who had visited all three classes at least two to three times prior to the experiment. Therefore, she was familiar with the students and the environment of each class. Upon the researcher's request, the teachers administered the pretest around one week prior to the researcher's first observational visit. On the day of the FonF treatment, the regular teacher was not present in the classroom, and the students were led to believe that the researcher was conducting a regular lesson in place of their regular teacher.

Students (N=24)⁶ were first paired up, and the 12 dyads were divided into two groups: the Input Enhancement (IE) Group (6 dyads) and the Comparison (C) Group (6 dyads).

Task 1

For the first task, all 12 dyads in both groups went through the same procedure. Each dyad was given a cartoon strip. The researcher informed the students of the names of the three characters in the comic strip, and asked them to read the comic strip. She then briefly checked for their comprehension of the material. This was an attempt to minimize their need

⁶ It should be noted that each of the three classes had different number of students, and that the exact same procedure had been conducted in each of the three classes. The total number of students from the three classes added up to 24, resulting in 12 dyads altogether.

to focus on the meaning in order to ensure that they would have most of their attentional resources available to focus on the form (Gass, Mackey, Alvarez-Torres, & Fernandez-Garcia, 1999; VanPatten, 1996). Each dyad was then given a piece of paper, and was asked to collaborate to write a story about what happened in the cartoon. The cartoon strip consisted of eight frames with six instances of the past tense usage altogether. Students were asked to work together, and were encouraged to think aloud and share their thoughts with each other. The exact instructions given were as follows:

“Work together with your partner and write a story about what happened in the cartoon strip. Start with ‘One day....’”

Upon providing the instructions, the researcher wrote the first two words (“One day . . .”) on the chalkboard. A tape-recorder was placed on the table for each pair, recording each dyadic interaction for further analysis. No additional instructions were given. Task 1 took about 35 minutes, and the written productions were collected as soon as the students were done with the task.

FonF via Input Enhancement

Immediately after the students had finished Task 1, dyads in the IE Group received a text with the target linguistic forms enhanced (see Appendix A). The enhancement was achieved by bolding, underlining, and increasing the font size of the target forms. The dyads in C Group received the same text with no visual enhancement (see Appendix B). The text was carefully designed to avoid any form of input flood, which could potentially have some priming effect for the C Group. Students were given approximately ten minutes to read the texts, which were collected afterwards.

Task 2

This was the same as Task 1, except for the fact that a different cartoon strip was given to the students. The second cartoon strip was comparable to the first one (used in Task 1) in the sense that the story had to do with something that happened in the past, and the same number of past tenses (6 instances) were used in the cartoon bubbles. Students were again asked to write a story about what happened in the cartoon, each dyad was encouraged to think aloud, and the think-aloud protocol was recorded. The procedure took about 35 minutes, and the written productions were collected as soon as the students were done.

Retrospective Questionnaires

Upon completing Task 2, the students were asked to fill out retrospective questionnaires. A different version was prepared for each group, and each student (as opposed to each dyad) had to answer the questionnaire independently. Students in the IE Group were asked if they noticed the visual enhancement during the reading task between the two comic strip stories, and if they could identify or give examples of the enhanced input (see Appendix C). Students in the C Group filled out a slightly different questionnaire (see Appendix D). It was hoped that the secondary data collected from the questionnaires would help probe into the attentional focus of the subjects during the treatment, and supplement the interactive think-aloud protocols.

Data Analysis

On Measures of Noticing

As noted previously, learners were asked to verbalize their thoughts, which were concurrently recorded as they completed the task. This type of online think-aloud protocol reporting has been used by researchers to partially observe the cognitive processes of the learners as they produce and analyze the target language (Jourdenais et al., 1995; Jourdenais, 2001). This is based on the assumption that information in focal attention is available for verbal report (Ericsson & Simon, 1993; Schmidt, 1990). The greatest merit in using this type of online measure lies in the fact that it works concurrently with the learner's ongoing thought processes. Previous studies that have incorporated the use of individual online protocols involved the researcher prompting the learner to verbalize his/her thoughts every three minutes (see Alanen, 1995; Jourdenais et al., 1995). These studies were conducted in laboratory settings where the researcher met with the student one-on-one. However, since the current study was done in a classroom setting, this sort of prompting was deemed unnatural and even obtrusive since the researcher would have had to be physically very close to the students, putting pressure on them to verbalize their thoughts. Additionally, taking into consideration findings from previous descriptive studies (Ellis, Baturkmen, & Loewen, 2001; Williams, 2001), which indicated that FonF arises naturally during learner-to-learner interactions, an *interactive* (rather than *individual*, which is often the case with this type of instrument) protocol was deemed more appropriate for this study. The merits of the online protocol notwithstanding, one must also bear in mind that it is by no means a complete or a precise measure of noticing. Given the complexity inherent in the notion of attention and noticing, researchers (e.g., Izumi, 2002; Izumi & Bigelow, 2000) have emphasized the importance of the use of multiple measures. To this end, the current study implemented a triangulation of measures which yield in the following corpus of data: (1) Students' written production of the cartoon stories (*written output* henceforth); (2) the online think-aloud protocols (i.e., two recordings of online data for each dyad from Task 1 & Task 2, respectively); (3) and the retrospective questionnaires collected from each student upon completing the two tasks.

Analysis and Coding

The written outputs were examined for the frequency and accuracy of the target forms. The frequency of occurrences of the target form (i.e., tokens) was tallied, and then the number of accurate forms was divided by the total number of tokens to produce the accuracy percentage. The data from the online protocols were first transcribed, and then again examined for the frequency of the target forms. In addition, transcriptions from the online protocol were identified for any language-related episodes (LREs). Following Swain and Lapkin (1995, 2001), an LRE was defined as any segment of the protocol in which the learners talked about language they are producing, question their language use, or other- or self-correct their language production. The following transcription illustrates a typical LRE extracted from the database:

- S1: *Because Lucy loves Chuck. Right?*
S2: *Misses, misses Chuck.*
S1: *Lucy...*
S2: *Misses...*

- S1: *Chuck.*
 S2: *No. Missed. Missed.*
 S1: *Missed?*
 S2: *Um. Simple past.*
 S1: *Simple past. Missed Chuck. O.K.*

The retrospective reports were analyzed specifically to see if the learners could provide an example of the enhanced input, and for any other insights that may help supplement/verify the other two types of data.

RESULTS

The First Research Question

The first research question sought to examine if learners in the IE Group who were presented with enhanced input would be more prone to notice the target linguistic forms than learners in the C Group. In order to answer this question, all three types of data were examined. The results from the three types of data are presented below.

Written Output Data

The written output data from both tasks were analyzed to compare the number of tokens in each group. As shown in Table 1, the results from showed that students in both groups sparingly used the target form in their written output.

TABLE 1
Use of the Target Form in the Written Output

	IE Group		C Group	
	Task 1	Task 2 (+enhancement)	Task 1	Task 2
Total attempt of the target form	4	3	7	6
Accurate use of the target form	1	2	4	4
Accuracy percentage	25%	66%	57%	66%

Note. The accuracy percentage was calculated by dividing the accurate tokens of the target form by the total number of tokens.

A cursory look at the table indicates that students in the IE Group produced the target forms with more accuracy (from 25% to 66%) after the exposure to enhanced input. However, the number of tokens is far too small to be interpreted in any reliable manner. Given the small number of tokens, it becomes necessary to examine the differences across the dyads. The results across the dyads for the two groups are summarized in Table 2.

TABLE 2
Use of the Target Form in the Written Output Across Dyads

Dyads	IE Group		Dyads	C Group	
	Task 1	Task 2 (+enhancement)		Task 1	Task 2
LE & HE	1	2	FC & AC	3	2
FE & TE	2	1	DC & NC	1	1
YE & IE	0	0	MC & RC	1	0
QE & CE	1	0	SC & MC	2	3
PE & JE	0	0	JC & DC	0	0
DE & JE	0	0	GC & PC	0	0
Total	4	3	Total	7	6

Note. Each student in the IE Group has been denoted by the addition of the letter “E” after his/her initial. Similarly, the letter “C” had been added to each participant’s initial in the Comparison Group.

In the IE Group, the target form (four tokens) was attempted by three different dyads in Task 1. In Task 2, the target form was produced by two dyads (three tokens) who also produced them in the Task 1. Two out of the six dyads did not produce any instances of the target form. The C Group produced slightly higher number of tokens in both tasks. Four dyads produced the target form in Task 1, and three dyads, in Task 2. In line with the observation made in the IE Group, those dyads that produced the target form in Task 2 were the ones that also attempted to produce the target form in Task 1.

In summary, the data from the written output show that learners in both groups sparingly used the target form, and that those learners who produced the target form in the Task 2 were the ones that also produced the target form in Task 1 (albeit inaccurately most of the time). Even though the written output data do provide some insight on the learners’ productive use of the target form, this type of data fails to provide any insights on the internal cognitive processes that they may have gone through while producing the written output. Taking into account that whatever has been noticed should be available for verbalization during or immediately after the experience (Schmidt, 1990), the online think-aloud protocol was analyzed to supplement the written output.

Think-aloud Protocol Data

The think-aloud reports were first transcribed and then analyzed by tallying the frequency of occurrences of the target form. The results from the online protocol revealed that students in the IE Group verbalized the target forms noticeably more in Task 1 than in Task 2. On the other hand, students in the C Group verbalized comparable number of tokens in both Task 1 and Task 2, as shown in Table 3.

TABLE 3
Use of the Target Form in the Online Protocol

	IE Group		C Group	
	Task 1	Task 2 (+enhancement)	Task 1	Task 2
Total attempt of the target form	14	5	9	8
Accurate use of the target form	3	3	4	4
Accuracy percentage	21%	60%	44%	50%

Note. The accuracy percentage was calculated by dividing the accurate tokens of the target form by the total number of tokens.

Comparing this with the results obtained from the written output (from Table 1), an interesting observation can be made. It appears that students in the IE Group verbalized the target form strikingly more in Task 1 (14 tokens in the online protocol), but actually used it in their written output just four times, getting it wrong most of the time in their written production (25% accuracy). However, in Task 2, after the exposure to enhanced forms, students in the same group verbalized the target form only five times, out of which three instances were actually used in their written output, and with 66% accuracy.

Cross-referencing the written output data with the protocol data indicated that learners in the IE Group may have experimented with the target forms more freely before the FonF intervention, and that they may have become more cautious of verbalizing the target form after the exposure to enhanced input. The results from the online protocols and the written output data are displayed in Table 4.

TABLE 4
Cross-reference of the Protocol Data with Written Output

	IE Group				C Group			
	Task 1		Task 2 (+enhancement)		Task 1		Task 2	
	Tokens	Accuracy%	Tokens	Accuracy %	Tokens	Accuracy %	Tokens	Accuracy %
Protocol	14	21%	5	60%	9	44%	8	50%
Output	4	25%	3	66%	7	57%	6	66%

As shown in Table 4, the overall results seem to indicate that the learners in the IE Group behaved somewhat differently after the FonF intervention. However, once again, it is important to examine the results across the dyads in order to see which dyad produced the target forms and when. The following table shows the results across the dyads in the two groups:

TABLE 5
Use of the Target Form in the Protocol and the Written Output

Dyads	IE Group				Dyads	C Group			
	Task 1		Task2			Task 1		Task 2	
	(enhancement)					Online	Written	Online	Written
	Protocol	Output	Protocol	Output		Protocol	Output	Protocol	Output
LE & HE	3	1	4	2	FC & AC	4	3	3	2
FE & TE	5	0	1	1	DC & NC	1	1	1	1
YE & IE	3	2	0	0	MC & RC	1	1	0	0
QE & CE	1	1	0	0	SC & MC	2	2	3	3
PE & JE	0	0	0	0	JC & DC	1	0	1	0
DE & JE	2	0	0	0	GC & PC	1	0	0	0
Total	14	4	5	3	Total	9	7	7	6

It is important to note that although the FE & TE dyad in the IE Group did not produce the target form in the written out, they *did* verbalize the form in both Tasks 1 and 2, as indicated by the online protocol data. Hence, it appears that the written output provided only a partial picture of what the learners focused on while completing the task. From the online protocol data, it was revealed that learners who produced the target form in Task 2 were the very ones who verbalized the target form in Task 1 as well. Assuming that learners who attempted to verbalize the target form in Task 1 were partially ready for the target form, one can cautiously infer that only those learners who were ready were able to notice the forms, accordingly and produced them in Task 2.

Retrospective Questionnaires

The retrospective questionnaires distributed to the IE Group asked if the learners were actually aware that some of the input was visually enhanced, and if they could recall and/or provide examples of what had been enhanced in the reading texts (see Appendix C). All of the 12 learners (6 dyads) in the IE Group reported that they had noticed some kind of visual enhancement in the reading given between Task 1 and Task 2. However, only three (Students LE, YE, and FE) out of the 12 students were able to provide more-or-less accurate examples of the enhanced forms. Hence, even though all of the 12 students in the IE Group did remember that some parts of the text were enhanced, the majority could not describe nor give examples of exactly what was enhanced. Out of the three learners who provided examples of the enhanced input, only two learners were able to provide accurate examples of the target form, that is, the backshifting in reported speech. The remaining one learner (Student FE) partially recalled that the enhanced input had to do with the past perfect tense, and provided sample sentences which were written in the form of past perfect tense. Hence, the results from the retrospective questionnaire revealed that these learners (Students LE and YE, and to some extent, student FE) demonstrated noticing of the target form by identifying and providing examples of the enhanced forms. In addition, it should be noted that all three students attempted to use the forms in Task 1, even before being exposed to the enhanced input. The fact that they experimented with the target form before the FonF intervention may be an indication that they had emerging knowledge of the form, further suggesting that they were developmentally ready to process the form. Again, it should be borne in mind that the number of tokens is too few to make any kind of generalization. However, the results do

indicate that learners who verbalized the target form in Task 1 were the ones that actually demonstrated noticing of the enhanced input (by recalling and providing correct examples).

The Second Research Question

The second question sought to examine potential factors which may play a part in inducing noticing on the part of the C Group. The results from the written output showed that learners in the C Group also produced the target form in the written output – seven tokens in Task 1, and six tokens in Task 2. In the think-aloud protocols, learners in the C Group verbalized the target form nine times in Task 1, and eight times in Task 2. Hence, learners in the C Group produced comparable tokens of the target form in both tasks. Once again, in line with the IE Group, learners in the C Group who produced the target form in Task 2 were the ones that also experimented with it in Task 1 (by verbalizing and/or constructing sentences with the target form). The results therefore suggest that learners in the C Group who appeared to be ready (as gauged by their verbalization in Task 1) used the target form even without the help of enhanced input.

Since the C Group did not receive any type of input enhancement, the retrospective questionnaire that they completed did not contain any questions that specifically probed their noticing of enhanced forms. However, one of the questions read: “Did you have a particular pattern/expression that you tried to use in writing the cartoon story? If so, could you provide an example?” Interestingly enough, Student FC from the FC & AC dyad answered:

“Yes, the relation between direct/indirect propositions. Example: He said that he had gone to his country.”

Similarly, his partner, Student AC wrote:

“We used past tense in both exercises. I am not sure if it was in the right way, like ‘Charlie Brown was talking...’”

Once again, these retrospective reports confirm that these students somehow seemed to have tuned in to the target form, even though they were not exposed to the enhanced input. One possible speculation would be that these learners may have been developmentally ready for the target form. Assuming that they were indeed more ready than others, it seems that these ready learners did not necessarily need any external stimuli to draw their attention to the relevant input, since the target form seemed to have coincided with the linguistic agenda in their learner-generated sequence (Corder, 1967).

Summary of Results

At this point, it is pertinent to go back to the research questions posed in the study, and summarize the findings. The first research question posed in the study sought to investigate if learners in the IE Group would be more prone to notice the target linguistic forms than learners in the C Group after the exposure to input enhancement. Results showed no striking difference between the IE Group and the C Group’s noticing of the target form, suggesting that the input enhancement had a meager role to play in enhancing learners’ noticing. Additionally, it was found that learners in the IE Group who verbalized the form in Task 1 and/or produced them in their written output were the ones that have demonstrated

noticing of the target form by actually providing examples of the enhanced input. In other words, a subset of those students who verbalized the forms in their think-aloud protocols in Task 1, also produced them in Task 2, and were able to provide examples (although one student was not exactly on target) of the enhanced input in their retrospective reports. Assuming that Task 1 served as an indicator of the learners' developmental readiness, the results confirm that learners who did notice the enhanced forms were those learners who were developmentally ready for the target form (as gauged by their productions in Task 1).

The second research question sought to investigate noticing on the part of the Comparison Group. From the online protocols and the written output data, it was found that learners in this group also noticed the target form, suggesting that noticing was not really induced by the external intervention. Moreover, it was also found that one dyad in the Comparison Group demonstrated noticing of the target form on all three measures, providing unambiguous evidence that they had noticed the target form even though they were not exposed to the enhanced input. Hence, results from the Comparison Group also provide evidence that noticing can occur even without the FonF intervention, possibly driven by learners' internal, cognitive factors.

DISCUSSION

In summary, the overall results revealed that input enhancement did not play a part in inducing learners' noticing of the target form. Instead, the findings indicate that noticing is largely driven by the individual learner's internal factors rather than the externally-induced salience of the target form. In light of the findings of the study, this section will look at some important issues that surfaced while analyzing and interpreting the results, including some constraining factors that need to be addressed when employing an implicit type of focus on form.

Avoidance

Although the general findings did not reveal any striking difference between the two groups, it was revealed that the IE Group did behave somewhat differently from the C Group after the FonF intervention. As noted in the Results sections, examining the target forms from the think-aloud protocols from Task 2 revealed a striking decrease in the number of target forms produced by the IE Group in the protocol data, after the FonF intervention. More specifically, the number of tokens in the protocol dropped by 64% in Task 2. In addition, even though the target form usage in the online protocol for Task 2 decreased drastically after the enhancement treatment, it was also found that whenever students verbalized the forms in the online protocol, they were also more likely to incorporate them in their written production, and with more accuracy. One possible factor could be attributed to that of *avoidance* (Schachter, 1974). In her classic study on error analysis, Schachter (1974) reported that certain group of students produced notably fewer instances of the relative clause formation (and therefore fewer errors) because these students perceived them to be difficult, and were actually trying to avoid using them. Likewise, in the current study, it appeared that some students, namely the ones who were deemed to have partial knowledge of the target form (i.e., who verbalized the target forms in Task 1), appeared to be more reluctant to use the target form after the FonF intervention. The fact that they avoided using this form provides some evidence that they may have in fact noticed the mismatch between the target forms and their interlanguage forms. Therefore, in Task 1, some students who noticed the

enhanced forms (i.e., those who verbalized the target form in Task 1) may have realized that these forms were used differently from how they had used them in Task 1. Hence, these students seemed to have exercised more discretion in Task 2, using them only if they were fairly confident of using them correctly. This suggests that the input enhancement did have some effect on those so-called ready learners, in that it induced them to be more conscious of their nontarget-like forms, shying them away from using the forms in their subsequent production. It is noteworthy to mention in passing that this kind of observation would not have been possible if it were not for the protocol reports.

Constraining Factors of Implicit Focus on Form

Learner Readiness and the Target Form

It has been pointed out that the IE Group behaved similarly to the C Group despite the exposure to the enhanced input. This may be partly attributed to the fact that input enhancement is a relatively implicit way of manipulating learners' noticing of target forms. In addition, and more importantly, findings suggest that learners' noticing of L2 forms is largely dependent on their readiness to process the target form, which cannot be easily manipulated by external interventions. In this regard, it appears that the biggest constraining factor for successful FonF appears to be the learner's developmental readiness vis-à-vis the target form.

The importance of learner readiness is implicitly or explicitly acknowledged in the SLA literature (e.g., Mackey & Philp, 1998; Spada & Lightbown, 1993; Williams & Evans, 1998) insofar as the choice of linguistic forms is concerned. According to Williams and Evans (1998), learner readiness is a crucial factor in achieving successful focus on form. They report that individuals who made the greatest gains with FonF were those who already had partial mastery of the form (i.e., participants who had at least moderate scores on the pretest); and therefore, it would be useful to examine a priori the learner's readiness with regard to the target form. However, gauging the learner's developmental readiness is by no means an easy or a simple task. This is especially more so in cases where no documentation of the developmental sequence of the target form is available. In the current study, even though a pretest was given, no systematic test was conducted to find out exactly how much the learners knew of the target form. In fact, since research findings have reportedly noted that highly frequent exposure to a target form increases its saliency to the learners (Doughty & Williams, 1998), a pre-test targeting specifically at the predetermined form was avoided for the fear of inadvertently priming the learners with some sort of input flood.⁷ Fortunately, in the current study, it turned out that Task 1 served as a relatively reliable indicator of gauging the learners' developmental readiness.⁸ And there was indeed evidence that the learners who verbalized the target forms in Task 1 also were the very ones who managed to notice the form of the enhanced input during the FonF intervention.

There was also some evidence that learners who are developmentally ready to process the target form can look for the relevant material from any given input even without the help of any FonF intervention. As we noted previously, this kind of unprompted noticing of the target form did take place in the C Group. One particular dyad (FC & AC) produced the target form in both of their written output data. Moreover, both students (FC & AC) demonstrated noticing of the target form in the retrospective reports, even though they did not

⁷ Input flood constitutes a form of input enhancement.

⁸ It should be noted that there are ways of gauging the learners' knowledge of the target form via indirect FonF methods using comprehension questions (see Han, D'Angelo, Magette, & Combs, 2002).

receive any type of input enhancement. The above finding is in line with Williams and Evans' (1998) study, where the researchers reported that some of their subjects went from low or middle scores to high ones, even in the comparison group. In view of the above, the findings highlight that learners who are developmentally ready are likely to seek out and tune in to relevant input on their own, even without the help of any pedagogical intervention, culminating in the type of focus on form which ideally taps into learners' internally-derived salience. In sum, it appears that above everything else, selecting a linguistic form which echoes the learner's developmental readiness seems to play a crucial role in achieving successful focus on form.

Attentional Capacity, Target Form, and the FonF Method

The target linguistic focus in the current study was the backshifting of reported speech. However, a close look at the results from the retrospective questionnaires indicated that some students in the IE Group thought that the enhanced forms constituted the *past perfect form*. Some credit needs to be given for this answer since all of the enhanced input had the past perfect forms embedded in them, with the exception of one past perfect progressive form. This, as well as data from the online protocol, forced a closer look into the data with regard to some students' use of the past perfect form. A close examination of the protocol data indicated that some students⁹ might have been more tuned in to using the past perfect after being exposed to the enhanced input. The following segment follows up on one students' use of the past perfect. It seems that one student (Student JE from the JE & DE dyad) somehow became more inclined to use the perfect tense in the second task. It is worth noting that this kind of episode targeting the past perfect did not occur in Task 1, but exclusively in Task 2 (after being exposed to the enhanced input). The following episodes, which took place in Task 2, are listed in the order of occurrence.

Episode 1

- DE: OK. He had a big problem because he didn't have any money or he doesn't have any money?
JE: He didn't.
DE: He didn't. It's past. It's good.
JE: He hadn't have.
DE: He didn't. He didn't have is good. Right?
JE: Why not he hadn't had?

Episode 2

- DE: She shows him a pair of gloves she already bought.
JE: That she had, had already bought.
DE: She already bought.

In the following episode, JE tries to experiment with the past perfect progressive. However, his attempt is not favorably received by his partner.

Episode 3

- DE: At the same time, Peggy bought herself a pair of gloves.

⁹ It was also mentioned in the Results section that out of the three dyads in the IE Group who demonstrated noticing of the target form, one dyad provided an example of the enhanced input in the form of the past perfect tense.

JE: No, no. At the same time, Peggy has been shopping in the same store.

DE: No, we cannot say “has been shopping” because you wrote about the story, and they met right now. “I had been shopping.” Does it mean “I make shopping, I did and I am doing now” too?

JE: Yes. Peggy has been shopping.

DE: You cannot say “I have been shopping.”

Despite the fact that some of JE’s attempts may not have been quite appropriate, it is evident that he did try to experiment with the past perfect in Task 2, which was something that he never attempted in Task 1. This observation prompted the researcher to go back and check JE’s retrospective questionnaire to see if he was able to provide some examples of the enhanced input. It turned out that JE provided two instances of what he thought were examples of the enhanced input. One was in the form of past perfect, and the other in the form of simple past. The exact question asked along with JE’s answers are reproduced in the following:

Question: “Do you remember what kinds of expressions were emphasized? Could you provide an example?”

Answer: “She had quit the job.”
“She made \$40,000.”

An interesting observation with regard to the example sentences he provided was that he actually remembered and wrote the exact content of the enhanced input, indicating that he did attend to it very closely.¹⁰ In line with the literature on attention and input processing (VanPatten, 1990, 1996), it seemed that JE was focusing more on the content matter of the enhanced forms rather than the structure, and therefore, was successfully able to recall the exact content of the enhanced input, as provided in the original text. Even though the forms he used to express the content did not perfectly echo with the enhanced input, it should be noted that he provided one of the examples in the past perfect form (“She had quit the job”). Hence, the fact that JE seemed to have focused more on the past perfect in Task 2 after the FonF intervention is partly substantiated by the example sentence he provided in the retrospective questionnaire. The reason as to why he focused on the past perfect could be attributed to a number of factors; one possible reason being that JE may have been developmentally ready for the past perfect form, rather than the target form in focus. Another possibility is that he may have “partially noticed” (Z. Han, personal communications, April 5, 2003) the enhanced input.¹¹

The foregoing observation raises two related issues. The first one is that learners do indeed process input for meaning before they process it for form. This lends support to VanPatten’s (1996) position that humans have limited attentional capacity and that learners are more likely to process input for meaning than form. Keeping this in mind, another related issue which has to do with learners’ attentional constraints arises. It appears that in order for visual input enhancement to be maximally effective, the target form embedded in the text

¹⁰ The enhanced text read as follows: Gloria said that she had quit her last job; She also said that she had made \$40,000 at her last job (see Appendix A).

¹¹ One of the reviewers pointed out that the fact that this student reproduced the exact content might be due to memorization and imitation rather than to processing of the form. However, since the task involved reading a meaning-bearing text, rather than isolated sentences, chances are that this student for some reason was more sensitive to the prepositional content (which involved a person’s annual income) and tuned in (and possibly paid more attention) to this piece of information.

needs to be *minimally enhanced* for it to effectively capture the learners' focal attention. In the current study, the target form involved the use of reported speech; and that the structure of reported speech is necessarily long compared to other structures such as the third person singular where one can simply highlight the “_s,” (e.g., “He drinkss coffee”) or just the verb alone (i.e., “He drinks coffee”). Moreover, reported speech necessarily comprises a complete clause with a subject and a verb as in “She said that she had been late to work.” As such, it is inevitable that the enhanced part constitutes a substantial part of the sentence, and a very meaningful part as well. Consequently, the enhanced input inevitably becomes too long to effectively capture the learner's focal attention. In a similar vein, Philp (2003) points out that because of the limited attentional capacity of the learner, the length of a recast may affect the learner's noticing of the recast, and suggests that shorter recasts may be more accurately recalled than longer ones. In this regard, given the limited attentional capacity of the students, and assuming that learners process for meaning before they process form, it is perhaps not surprising that JE concentrated more on the content of the enhanced forms, especially since the enhanced part in this case comprised the most informative and meaningful part of the sentence. Accordingly, it is possible that JE may have focused more on the form rather than content, had the target form been a structure that is shorter and more transparent in nature.

In summary, it appears that if the enhancement had not involved such a substantive portion of a sentence, the target form may have appeared more salient, and therefore, more readily noticeable by the learners. Hence, the above speculations reinforce the fact that learners' attentional capacity is limited, and that learners first process input for meaning. And based on the findings, it then follows that a linguistic focus which necessarily comprises a whole clause may not be the best candidate for visual input enhancement. Of course, this is only speculation. However, this observation is important in that it highlights the fact that FonF studies (especially the proactive kind) should pay special attention to the learner's limited attentional capacity with regard to the nature of the target linguistic form as well as the FonF technique employed. As Williams and Evans (1998) aptly point out, “not all forms are equal in terms of the effectiveness of FonF activities” (p. 151). Thus, it appears that textual input enhancement may be better suited for linguistic item(s) that can be highlighted in a succinct and minimal manner. Once again, if the learners are ready, they will notice the forms even if there is no textual enhancement involved. However, provided that not all learners are psycholinguistically ready or if their readiness is not easily assessable, the textual manipulation should ideally be done in a succinct and minimal manner, in order to increase the likelihood of capturing the learner's focal attention.

Learner Variables

The fact that the task employed in the study was quite spontaneous and not constrained in any way gave the students the freedom to attend to different aspects of the L2 as they pleased. This is exhibited by the rather small number of tokens produced by the students, suggesting that the type of task employed in the current study did not in any way force them to produce the target form. Owing partly to the nature of the task employed in the study, each student exhibited a lot of variability in what he/she focused on. It appeared that students often seemed to have focused on some aspect of the target language driven by their own internal, psycholinguistic agenda as well as other individual factors pertaining to their backgrounds such as their native language, L2-training experience and different types of world knowledge they brought with them.

In analyzing the online protocol reports, it was found that different learners experiment with different forms, and formulate different hypotheses vis-à-vis different linguistic forms. Some similar patterns were observed for students from different L1

backgrounds. For example, amongst the Spanish speakers and Chinese speakers, many instances of LREs involving third-person singular possessive determiners (*his/her*) were observed. Most of such episodes were very brief since many of the speakers were able to self-correct themselves as shown in the following:

e.g.) *Yeah, Charlie went to a park, and met her, his friend, with her, his dog.*

It appears that Chinese speakers, who use the same phonetic code for the possessive determiner, may have encountered difficulty with these determiners. Not surprisingly, this sort of LREs targeting the third-person singular determiner was observed mostly in dyads with a student with Chinese L1 background whereas such episodes were not observed in Korean L1 speakers, suggesting that the difference between the learner's L1 and L2 can affect the learners' noticing of forms.

It also appeared that learner noticing also seem to be influenced by their L2-learning experience. In searching for the past participle of *throw*, a Chinese speaker verbalized in the protocol: "*Throw, threw, thrown,*" which appeared to be an artifact of what is known as "transfer of training" (Han & Selinker, 1999). The researcher had an opportunity to ask this particular student about this issue after the treatment period. He confirmed that he had in fact memorized most verb forms in that order: present, past, past participle; and in searching for the right form of the verb, it appeared that he had recalled it in the manner that he learned them.

In summary, an analysis of the think-aloud protocol revealed that different learners focused on different aspects of the L2, driven not only by their internal agenda, but also by their L1, educational and training backgrounds, as well as individual predilection. All of the aforementioned factors (and possibly many others) seem to work in tandem, resulting in divergent types of noticing of target and nontarget forms. This in turn, seemed to have an impact on the effectiveness of proactive focus on form, where the objective is to induce the learners to focus on a specific aspect of the L2 input. Even though it may be impossible to control for all of these variables, it would be useful to control for their L1 and/or L2-learning backgrounds.

Limitations

As mentioned at the outset of the study, this has been an exploratory study with a number of shortcomings. Even though a few of them have been alluded to throughout the paper, some need to be spelled out explicitly.

First and foremost concerns the choice of the target linguistic form. As has been mentioned repeatedly throughout the paper, it is important to examine a priori the learner's developmental readiness vis-à-vis the target form. As we have witnessed, the treatment effect is very much constrained by the learner's developmental readiness with regard to the target form. Despite the difficulties and practical constraints involved in assessing learner readiness, it is crucial to ensure a priori that the participants are ready for the target form in order to increase the likelihood of achieving successful focus on form, especially when the FonF method to be employed is of the implicit (and proactive) kind.

There was another problem concerning the particular linguistic form chosen in terms of what is actually prescribed to be correct in grammar books as opposed to what is actually used in ambient speech. Even though "He said that he *had left* the day before" may be prescriptively correct, some people may opt to say "He said he *left* the day before," which could be considered as equally acceptable, especially when one is engaged in a colloquial

conversation. As Celce-Murcia and Larsen-Freeman (1999) point out, the backshifting rule is difficult because there are several exceptions in actual usage, “a fact to which most descriptive and ESL/EFL grammar books are sensitive, and one which calls the ‘rule’ into question” (p. 690). They further point out that research has yet to reveal a completely satisfying unity among the exceptions. Although the prescriptive criterion was called for in analyzing the results of the current study, the very fact that the backshifting rule is not always adhered to by native speakers, posed an inherent problem.

The third point, closely related to the target form, has to do with the tasks employed in the study. For the current study, it was deemed important that the task demands should not force the learners to produce one particular form, but allow for a more natural, generative use of the target form. This was an attempt to avoid inadvertently priming the students in the comparison group by some type of task-induced attention to form. In retrospect, it appears that there is merit in designing a task that is more rigid with specified number of obligatory contexts where students are forced to use the target form. This may have controlled for the divergent noticing of forms exhibited by the learners, and more importantly, it would have helped to quantify the results in a more manageable and reliable manner. A more rigorous study design needs to be devised in responding to the limitations mentioned above.

Another shortcoming that is related to task effects and study design concerns the issue of learner variables. This needs to be carefully thought out and controlled for in designing this kind of study since such “variability in learner focus proposes a methodological challenge for researchers and pedagogical challenge for teachers especially if they wish the learners to focus on certain specific aspects of the input” (Izumi, Bigelow, Fujiwara, & Fearnow, 1999, p. 446). As witnessed in the current study, learners inevitably bring with them to the classroom divergent backgrounds such as different native languages, training backgrounds, professional backgrounds, and motivation, which can potentially confound with the treatment effects. Of course, it is virtually impossible to control for these variables in a normal classroom with real L2 learners (Hulstijn, 1997). However, all of these variables do affect a student’s noticing of different aspects of the target language. Hence, it would be most desirable if the participants consisted of a more homogeneous group in terms of their L1 background, language-training experience, occupation, and motivation for studying English. Provided that circumstances permit, subsequent studies should try to control for this sort of variable as much as possible.

The online interactive protocol used in the current study, that is having learners think aloud while interacting with each other, did have its share of advantages in that it is relatively unobtrusive, and allows the researcher to follow the learners’ thought processes in a natural manner. In addition, students naturally verbalized their thoughts without having the researcher nudging and prompting them to think aloud every few minutes. Without a doubt, the online protocol provided many insights to the study. However, there was an unforeseen drawback with the interactive protocol in that the learners could learn from each other while interacting. This was something that was not so desirable from a research perspective in that it may interfere with the FonF intervention since interactions can also function as a “priming device” (Gass, 1997). This inevitably weakens the reliability of any findings of the study since any observed benefits could have been due to priming induced by learner interaction, rather than input enhancement. On a related note, in having a dyad construct the written output, it was difficult to tell which student contributed to what in composing the output. Fortunately, the online reports partly made up for this weakness since analyzing the think-aloud reports made it possible to distinguish which learner contributed to what, in constructing the written output.

CONCLUSIONS

The results of this study illustrate the complexity of factors surrounding the successfulness of implicit FonF, namely, input enhancement. In the preceding sections, I have discussed some factors that need to be taken into consideration in achieving successful focus on form. The first one was Learner Readiness and the Target Form. It is important to note that Learner Readiness speaks to the learner's internally-created saliency whereas the Target Form speaks more to externally-created saliency. Similarly, the second factor that was discussed was Attentional Capacity, Target Form and the FonF Method. Once again, Attentional Capacity speaks to learner internal factors whereas the FonF Method speaks to external factors. Hence, it is evident that factors that correspond to internal saliency and external saliency necessarily go hand-in-hand. In other words, the target form should echo the learner's built-in syllabus (thereby generating internally-created saliency), and the FonF method should echo the learner's attentional constraints (thereby enhancing externally-created saliency) in order to culminate in successful focus on form. In this regard, and based on the results of this study, it may be speculated that achieving successful focus on form is largely dependent upon (1) a sound understanding and respect for the learner's built-in syllabus, (2) gauging the learners' developmental readiness with regard to their learner-generated syllabus, and selecting a linguistic feature which is developmentally appropriate for a given group, and (3) employing an appropriate means to increase the perceptual salience of the target form. As such, it is pertinent to underscore once again that internal saliency should ideally echo with external saliency (and vice versa).

In hindsight, it seems that it is precisely for this reason that reactive FonF has been more favorably received by researchers in that it responds to the different needs of the learners, and that teachers can provide immediate feedback on the problematic feature, targeting different features as they arise in context. Therefore, incidental or reactive FonF is "necessarily broad-based – that is, where many different forms rather than one single form are likely to be attended in the context of performing a communicative activity" (Ellis et al., 2001, p. 282). However, despite the positive side of reactive FonF in which the burden of choosing the form is somewhat released, research on reactive FonF studies has suggested that the effectiveness of recasts depends on focused and consistent treatment of the target form (Han, 2002a). Hence, even in the case of incidental or reactive FonF, especially in a classroom setting, there is a need for the teacher to focus on a particular form (or forms), in order to provide focused and consistent feedback, specifically aimed at the target form. In other words, there is a need for a reactive FonF, which is also proactive in nature. As such, the issue of achieving a harmony between the learner's internal saliency and external saliency concerns not only proactive FonF, but also reactive FonF. It is therefore crucial that the researcher or practitioner should be aware of, and be respectful of, the learners' built-in syllabus and accommodate any external interventions accordingly. However, as we have seen, selecting the appropriate forms to focus on is not always an easy task since learning takes place within the learner's mind, which cannot be easily manipulated by external intervention. It follows then that more effort should be invested in carefully identifying the forms suitable for the learners in hopes of converging internal saliency with external saliency. This, coupled with an appropriate type of FonF, will increase the likelihood of achieving consciousness-raising in the true sense of the word, where there is that much-desired match between externally-created salience which is in tune with internally-generated salience.

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APPENDIX A

Lying on the Job

“Lying during a job interview is risky business,” says Martha Smith, director of the management consulting firm Maxwell Enterprises. According to Smith, the truth has a funny way of coming out. She tells the story of one woman applying for a job as an office manager. The woman **told the interviewer that she had graduated** with a B.A. degree in Economics. Actually, it was later found that she had majored in French Literature, not Economics. She also **said that she had made** \$40,000 at her last job. However, the truth was about \$8,000 less. “Many companies really do check facts,” warns Smith. In this case, a call to the applicant’s company revealed all the lies.

Smith relates a story about another job applicant, Gloria. During an interview, Gloria **said that she had quit** her last job, and **added that she had been dissatisfied** with her working hours in her previous job. Gloria did well on the interview, and landed the new job. She was doing well until the company hired another employee, Pete. It turned out that Gloria and Pete used to work at the same company. Pete eventually **told his boss that his old company had fired** Gloria. He also **added that Gloria had been fired** because of her lying habit. In spite of the fact that the new employer was very pleased with Gloria’s job performance, he **said that he just couldn’t trust** her anymore. He **mentioned that he had lost** all the trust he had. Not surprisingly, Gloria got fired – again. “It’s a small world, and the truth always comes out sooner or later,” says Smith.

APPENDIX B

Lying on the Job

“Lying during a job interview is risky business,” says Martha Smith, director of the management consulting firm Maxwell Enterprises. According to Smith, the truth has a funny way of coming out. She tells the story of one woman applying for a job as an office manager. The woman told the interviewer that she had graduated with a B.A. degree in Economics. Actually, it was later found that she had majored in French Literature, not Economics. She also said that she had made \$40,000 at her last job. However, the truth was about \$8,000 less. “Many companies really do check facts,” warns Smith. In this case, a call to the applicant’s company revealed all the lies.

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APPENDIX C

Questionnaire

Name: _____

Date: _____

Native language: _____

1. Did you notice that some of the expressions in the reading 'Lying on the Job' were emphasized and underlined **(eg., like this)**?
2. Do you remember what kinds of expressions were emphasized?
Could you provide an example?
3. Did you try to use these forms in writing the cartoon story?
4. Do you think the reading 'Lying on the Job' helped you in re-writing the cartoon story? If so, in what way?
5. What did you learn from this lesson?
6. Any other comments?

APPENDIX D

Questionnaire

Name: _____

Date: _____

Native language: _____

2. Do you think the reading “Lying on the Job” helped you in writing the cartoon story? If so, in what way?

3. Did you have a particular pattern/expression that you tried to use in writing the cartoon story? If so, could you provide an example?

4. What did you learn from this lesson?

5. Any other comments?